



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/826,887	04/06/2001	Hirokatsu Fujiwara	500.39978X00	3367
20457	7590	04/27/2004	EXAMINER	
ANTONELLI, TERRY, STOUT & KRAUS, LLP			ELMORE, REBA I	
1300 NORTH SEVENTEENTH STREET				
SUITE 1800			ART UNIT	PAPER NUMBER
ARLINGTON, VA 22209-9889			2187	
DATE MAILED: 04/27/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/826,887	FUJIWARA ET AL. <i>S</i>	
	<b>Examiner</b>	<b>Art Unit</b>	
	Reba I. Elmore	2187	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 30 January 2004.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1,2,6 and 9 is/are rejected.
- 7) Claim(s) 3-5,7,8,10 and 11 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 06 April 2001 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | Paper No(s)/Mail Date. _____.   |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____.                                   |

## DETAILED ACTION

1. Claims 1-11 are presented for examination.

### *Specification*

2. The objection to claim 6 is *withdrawn* due to the amendment.
3. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### *35 USC § 102*

4. The rejection of claims 1, 6-7 and 10-11 as being anticipated by Olarig et al. is *withdrawn* due to applicant's arguments.
5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-2, 6 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Moyer et al.
7. Moyer teaches the present invention (claims 1 and 6) as claimed including an information processing system comprising:

a memory unit (e.g., see col. 2, lines 60-67);

a memory controller (e.g., see Figure 3 and col. 5, line 44 to col. 6, line 42);

wherein the memory controller comprises:

storing means for storing changeable memory control timing information (e.g., see Figure 3 and col. 5, line 44 to col. 6, line 42);

monitoring means for monitoring an operating state of the memory unit (e.g., see Figure 3 and col. 5, line 44 to col. 6, line 42);

a register for setting the memory control timing information from the memory control timing information storing means (e.g., see Figure 3 and col. 5, line 44 to col. 6, line 42); and,

a control means for controlling an access timing to the memory unit based on the memory control timing information in the register and for changing the information stored in the memory control timing information storing means based on information from the monitoring means (e.g., see Figure 3 and col. 5, line 44 to col. 6, line 42).

As to claims 2 and 9, Moyer teaches the memory unit includes a mixture of a plurality of groups of memory elements different in operation (e.g., see col. 2, lines 60-67), wherein the storing means stores the memory control timing information corresponding to each of the groups of memory elements (e.g., see col. 3, lines 1-37).

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

9. Claims 1-2, 6 and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Silvkoff et al.

Art Unit: 2187

---

10. Silvkoff teaches the present invention (claims 1 and 6) as claimed including an information processing system comprising:

a memory unit (e.g., see Figure 1);

a memory controller (e.g., see col. 2, line 67 to col. 3, line 16);

wherein the memory controller comprises:

storing means for storing changeable memory control timing information (e.g., see Figures 1-2);

monitoring means for monitoring an operating state of the memory unit (e.g., see Figures 1-2);

a register for setting the memory control timing information from the memory control timing information storing means (e.g., see Figures 1-2); and,

a control means for controlling an access timing to the memory unit based on the memory control timing information in the register and for changing the information stored in the memory control timing information storing means based on information from the monitoring means (e.g., see Figures 1-3).

As to claims 2 and 9, Silvkoff teaches the memory unit includes a mixture of a plurality of groups of memory elements different in operation (e.g., see col. 1, line 58 to col. 2, line 39), wherein the storing means stores the memory control timing information corresponding to each of the groups of memory elements (e.g., see col. 1, line 58 to col. 2, line 39).

***35 USC § 103***

11. The rejection of claims 2 and 8-9 as being unpatentable over Olarig et al. is *withdrawn* due to applicant's arguments.

12. Claims 3-5, 7-8 and 10-11 are objected to as being dependent upon a rejected base claim, but would be allowable over the art of record if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

*Response to Applicant's Remarks*

13. Applicant's arguments with respect to claims 1-11 have been considered but are moot in view of the new ground(s) of rejection.

*Action is made Final*

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

*Conclusion*

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reba I. Elmore, whose telephone number is (703) 305-9706. The examiner can normally be reached on M-TH from 7:30am to 6:00pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the art unit supervisor for AU 2187, Donald Sparks, can be reached for general questions concerning this application at (703) 308-1756. Additionally, the official fax phone number for the art unit is (703) 746-7239.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Tech Center receptionist whose telephone number is (703) 305-3800/4700.



Reba I. Elmore  
Primary Patent Examiner  
Art Unit 2187

April 24, 2004